IN THE SPECIFICATION:

Please amend the specification as follows:

(1) The paragraph from page 1, line 12 to page 1, line 17 has been amended as follows:

A brake pad set used for a disk brake of an automobile generally comprises a steel backing plate and a brake pad adhered to the backing plate. Pressing and heating powder material in which a fiber, a filler, and a binder are mixed form the brake pad. The disk brake reduces the speed of an automobile by pressing the brake <u>bad</u> pad to a steel rotor disk.

(2) The paragraph from page 1, line 29 to page 2, line 7 has been amended as follows:

In order to fix the work on the conveyor, a mechanical But, the method is not clamp was conventionally used. suitable for mass production of the work since works should inefficiently be bolted one by one. Therefore, it was proposed that the works are fixed with magnets since the disk pad set made **from** of backing plate of the is ferromagnetic steel. To be concrete, a plurality of plates made **from** of magnetic metal may be attached to a chain In this case, the plates conveyor to transport the works. themselves are permanent magnets and the plates circulate. At a position of the conveyor after $\frac{a}{2}$ the machining is finished, the work must be separated from the plate. But, it is not

easy to **peel off** <u>separate</u> the plate since the plate is permanent magnet.

(3) The paragraph from page 2, line 8 to page 2, line 18 has been amended as follows:

Then, it was proposed that permanent magnets were positioned under a rubber belt of a conveyor to fix works on the rubber belt since nonmagnetic rubber made it easy to remove the works from the conveyor. In this case, however, the elasticity of the rubber causes the work to move in during machining, resulting in poor accuracy in the machining. Therefore, it was proposed that hard and ferromagnetic plates are replaced to electromagnets, and at a position where a work is removed from a conveyor, electric current is stopped to disappear eliminate the magnetic force, which causes the work to easily be removed.

(4) The paragraph from page 2, line 19 to page 2, line 25 has been amended as follows:

But, the above construction is not realized unless the electromagnets are movable. In a mechanism to move the electromagnets, contacts of electrodes must be slidable, so that thus, wear of the contacts may be a can be a serious problem. In addition, the electromagnet is heavy since it is provided with a coil, which increases load of on the conveyor. Furthermore, these problems may shorten the life of the conveyor.

(5) The paragraph from page 4, line 23 to page 4, line 28 has been amended as follows:

Figure 1 is a plan view showing an overall construction of a work fixing device according to present invention. A transporter 10 is provided with sprocket wheels 10a, 10a at both ends thereof and chains 10b, 10b between the sprocket wheels 10a, 10a, and a plurality of plates 11 is endlessly connected to respective rinks links of the chains 10b, 10b.

(6) The paragraph from page 4, line 34 to page 5, line 6 has been amended as follows:

Two machining heads 12, 13 are mounted substantially upper center of the transporter 10. The first machining head 12 is a grinding head in this embodiment. The machining head 12 is, as illustrate illustrated in Fig. 2, provided with a rotary grinder 12a with a cylindrical grinding face. This rotary grinder 12a is used for finishing a friction face of a disk pad set as a work to be flat and for forming inclined faces at both ends of the friction face.

(7) The paragraph from page 5, line 19 to page 5, line 24 has been amended as follows:

At an upper portion of the transporter 10 is installed a U-shaped base 14 made <u>from of magnetic body</u> such as steel, and the conveyors guides 10c, 10c are fixed to the U-shaped base 14 at ends thereof. Tips of the U-shaped base 14 slightly

contact with both ends of the plate 11 to prevent the plate 11 from meandering.

(8) The paragraph from page 6, line 8 to page 6, line 15 has been amended as follows:

In this embodiment, a permanent magnet is used as the magnet 15. Instead of the permanent magnet, an electromagnet can be used. It This is because slidable contacts should not be are not used since the magnet is fixed in the present invention. However, it is advantageous to adopt a permanent magnet since it allows the dimension of the magnet to be small, resulting in a smaller work fixing device. As a result, running costs such as rate are to power consumption can be reduced.

(9) The paragraph from page 6, line 16 to page 6, line 30 has been amended as follows:

The work 1 is machined as described below. The rotation of the sprocket wheel 10a of the transporter 10 through a motor not shown allows the chain 10b to circulate, which further causes the plates 11 fixed to the rinks links of the chain 10b to circulate. The work 1 is mounted on the plate 11 of the transporter 10 from a work supplier not shown. Several works can be mounted on one plate. At the rear end of the plate 11 is situated a pressure piece 11a, which pushes the rear end of the work 1 by the movement of the plate 11 to set the work 1 in a proper posture at a predetermined position on

the plate 11. It is possible to separately mount a guide plate not shown or the like over the plate 11 to press the work 1 against the pressure piece 11a in a proper posture at a predetermined position on the plate 11. The work 1 starts movement while maintaining this condition.

(10) The paragraph from page 7, line 7 to page 7, line 21 has been amended as follows:

In the above embodiment, the U-shaped base 14 is made from of magnetic body such as steel. As a result, when the conveyor quide 10c is made from of steel, the magnet 15 also magnetizes the conveyor guide 10c, which may cause the plate 11 to be absorbed attracted. When the chain 10b is made from of iron, the conveyor guide 10c absorbs attracts the chain 10b However, since the U-shaped base 14 is positioned between the conveyor guide 10c and the magnet 15, which means the conveyor guide 10c does not directly contact the magnet 15 but the conveyor guide 10c is considerably apart from the magnet 15, the influence of the magnetic force of the magnet 15 becomes small, which does not prevent the transportation of In addition, the conveyor guide 10c mainly the plate 11. contacts the roller of the chain 10b, therefore, the contact is a spot contact or a line contact, resulting in small absorption attraction.

(11) The paragraph from page 7, line 22 to page 7, line 31 has been amended as follows:

If the influence of the magnet 15 and the conveyor guide 10c to the movement of the transporter 10 is strong, the conveyor guide 10c can be <u>formed of</u> a nonmagnetic body. When the conveyor guide 10c is made <u>from of</u> magnetic material, fixing the conveyor guide 10c to another member, which is not influenced by the magnet 15, not to the U-shaped base 14 can eliminate the influence of the magnetic force. Otherwise, the above problem may be resolved by locating a packing or the like at a position where the U-shaped base 14 and the conveyor guide 10c are connected with each other.

(12) The paragraph from page 8, line 27 to page 9, line 9 has been amended as follows:

Concave portions 24c, 24c are formed on the upper face of the C-shaped base 24 in opposition to the plate 21. A slider 27 is inserted in the concave portions 24c, 24c. Figure 5 is an enlarged partially cross-sectional view of a part between the slider 27 and the plate 21. As illustrated in this figure, a slightly projecting contact portion 21c is formed on the plate 21 at a position opposite to the slider 27, and the contact portion 21c contacts the slider 27 to secure a clearance δ , which prevents the plate 21 from directly contacting the C-shaped base 24. Magnetic or nonmagnetic material, nonmetal or metal can be used for the slider 27. In this case, the slider 27 plane-contact the plate 21. PV value (P: maximum permissible load [N/mm²]+, V: maximum permissible

velocity [m/sec]) of the slider 27 is preferably more or equal to or greater than 0.3, and is more preferably more or equal to or greater than 0.50. For instance, oil-impregnated metal, cast iron and sintered metal containing solid lubricant such as graphite, tungsten and molybdenum can be used for the plate.

(13) The paragraph from page 9, line 10 to page 9, line 26 has been amended as follows:

The slider 27 may be constructed with at least one ball or roller. Magnetic The slider 27 made of magnetic material generates absorbing attracting force due to magnetic force. But, when the slider 27 is a ball or a roller, the slider 27 spot-contacts or line-contacts the plate 21, so that the absorbing attracting force is small, which does not affect the transportation by the plate 21. Even if the slider 27 and the plate 21 plane-contact with each other, it is possible to reduce the absorbing attracting force to an extent that the force does not affect the transportation by the plate 21 since the contact area between the slider 27 and the plate 21 is small and these materials are slippery. In addition, other construction may be adopted, for example, instead of the contact portion 21c, the slider 27 can be provided with a projecting portion to secure the clearance δ at the contact portion between them. In order to prevent dust or the like

from $\frac{\text{inserting}}{\text{coming}}$ into the clearance δ , a scraper or an air blower is preferably installed.

(14) The paragraph from page 10, line 15 to page 10, line 33 has been amended as follows:

When the transported work 1 reaches in the machining range of the machining head 12, the work 1 is subject to magnetic field of produced by the magnet 15. Then, a magnetic route path is formed from one magnetic pole (for instance, right one in the figure) of the magnet 15 to the right side of the C-shaped base 24, the right magnetic portion 21b of the plate 21, the ferromagnetic portion (backing plate) of the work 1, the left magnetic portion 21b of the plate 21, the left side of the C-shaped base 24 and the other magnetic pole (left one in the figure) of the magnet 15 in this order. This magnetic route path allows the work 1 to securely be fixed attracted to the magnet 15. Under the condition, the work 1 is fixed on the plate 21, and is subjected to grinding by the machining head 12 or channel forming by the machining head 13 while it moves continuously. Hardness of the plate 21 prevents the movement of the work 1 in the machining After the machining, the work 1 reaches by the processes. transporter 10 to a position where the magnetic force of the magnet 15 does not influence, so that the work 1 is easily removed from the plate 21.

(15) The paragraph from page 11, line 19 to page 11, line 31 has been amended as follows:

Under the condition that the work 1 is fixed by the magnet 15, the absorbing attracting force works against the transporter 10. But, the load is produced only for fixing the work 1; therefore it is small in relation to total weight of the transporter 10 with the plate 11, 21. So Accordingly, there is not much difference between the case that the transporter 10 moves without machining and the case that the transporter 10 moves while the work 1 is machined by the all heads 12, 13. In the present invention, since a large electromagnet with a coil is not required and the magnet 15 is fixed, the load of the transporter 10 can remarkably be reduced. In addition, slidable contacts that are essential to a movable electromagnet become unnecessary, resulting in long life of the transporter 10.

(16) The paragraph from page 11, line 32 to page 12, line 19 has been amended as follows:

The present invention is not limited to the above embodiments. In this invention, the work 1 transported by the transporter 10 can be fixed under the machining head 12, 13 by the magnet 15, and at the same time, the work 1 and the magnet 15 do not directly contact with each other, and the work 1 does not move in during the machining. If the work 1 and the magnet 15 directly contact with each other, resistance and

wear due to **sliding** <u>friction</u> will increase. Therefore, a nonmagnetic clearance holder is formed between the magnet 15 and the work 1. The magnet in the above construction is not limited to the magnet 15 in the figure since if a magnetic body is absorbed attracted to the magnet 15, the magnetic body is also magnetized to be a magnet. In this invention, when the U-shaped base 14 and the C-shaped base 24 are made from magnetic material, the bases 14, 24 actually become magnets since the magnet 15 magnetizes them. The ferromagnetic portion of the work 1 is allowed not to directly contact these magnets through the nonmagnetic clearance holder. The clearance holder is plates 11 themselves in the embodiment shown in Fig. 3. In the embodiment shown in Fig. 4, the clearance holder is the combination of the central nonmagnetic portion 21a, magnet fixing member 26 and the clearance δ .

(17) The paragraph from page 13, line 7 to page 13, line 11 has been amended as follows:

Further, whether the U-shaped base 14 and the C-shaped base 24 are magnetic or nonmagnetic does not matter if only is not essential so long as the magnet 15 is supported in incorporated in the work fixing device is short, and the shape of the bases is not limited. For example, the base may be a mere plate or a hollow rectangular base without an opening 14a.

(18) The paragraph from page 13, line 20 to page 14, line 7 has been amended as follows:

As described above, the work fixing device according to the present invention comprises: plurality of plates, on each plate of the plurality of plates a work with a ferromagnetic portion being mounted; a transporter for endlessly connecting and circulating the plurality of plates; a magnet fixed to the transporter, the magnet fixing the work, which is transported by the transporter, through magnetic force on each plate of the plurality of plates; and a nonmagnetic clearance holder for separating the magnet and the work from each other at a predetermined interval. With this construction, when the transporter transports a the work and it reaches a position to be machined, the magnet fixes the work during the machining. Since the magnet is fixed, even if an electromagnet is adopted, contacts of electric poles should need not be slidable, which provides results in no problem on wear of the electric poles. Further, a clearance holder separates the work and the magnet from each other, so that thus, the load of transportation applied to the transporter is to be reduced. In addition, since the clearance by the clearance holder is constant, the work does not move during the machining. After machining, the work is transported to a position where the magnetic force of the magnet does not influence will not

reach, which allows the work to be removed from the transporter with ease.

(19) The paragraph from page 14, line 8 to page 14, line 15 has been amended as follows:

When the plate is provided with a nonmagnetic portion and magnetic portions at both ends of the nonmagnetic portion, and a nonmagnetic clearance holder separates the magnet and the work from each other at a predetermined interval, a closed magnetic route path is formed among the magnetic portions at both ends of the nonmagnetic portion, the ferromagnetic portion of the work and the magnet, which increases absorbing attracting force by the magnet.